

Claims

1. An article useful for edge sharpening comprising a metal body having at least one honing surface coated with a ceramic created in an electrolytic bath.
2. An article of claim 1 having a handle.
3. An article of claim 1 wherein said metal body is aluminum.
4. An article of claim 1 wherein said abrading surface comprises a grit selected from aluminum oxide, silicon carbide, and diamond..
5. An article of claim 1 wherein at least one honing surface is substantially flat.
6. An article of claim 1 wherein at least one honing surface is curved.
7. An article of claim 1 having a V groove therein.
8. An article of claim 1 having at least one edge treated in said electrolytic bath to concentrate current thereon while said ceramic coating is created on said surface.
9. An article of claim 1 including at least one abrading surface.
10. An article of claim 9 wherein said abrading surface is an abrasive strip affixed to a recess in said article.
11. An article of claim 10 wherein said abrading surface comprises silicon carbide, diamond or aluminum oxide.
12. An article of claim 1 having a triangular profile.
13. An article of claim 7 having a triangular profile.
14. An article of claim 12 having at least one V groove.

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15. An article of claim 12 having at least one abrading surface.
16. An article of claim 15 wherein said abrading area is affixed to a recess in the surface of said article.
17. An article of claim 15 wherein said abrading area comprises silicon carbide, diamond, or aluminum oxide..
18. An elongated sharpening bar comprising a generally rectangular-shaped metal body having attached thereto at least one abrasive strip, the balance of said bar being substantially covered with a ceramic coating created in an electrolytic bath.
19. Article of claim 8 wherein said edge is rounded.
20. Method of making a sharpening device having at least one edge comprising placing a metal incipient sharpening device as an electrode in an electrolytic bath and imposing a modified shaped wave alternating current in said bath.
21. Method of claim 20 wherein said modified shaped wave alternating current creates a plasma discharge within said bath, resulting in microarc oxidation on the surface of said incipient sharpening device.
22. Method of making a sharpening device comprising forming a hard coating on an incipient sharpening device by (i) immersing the incipient sharpening device in an electrolytic bath comprising a passivating agent and an electrolytic agent, and (ii) passing a modified shaped-wave alternating electric current from a source of 250 to 800 volts through the surface of the incipient sharpening device, wherein the modified shaped-wave electric current rises from zero to its maximum height and falls

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to below 40% of its maximum height within less than a quarter of a full alternating cycle thereby causing dielectric breakdown and the formation of a ceramic coating on the surface of said incipient sharpening device, and removing the completed sharpening device from the electrolytic bath.

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23. An edge sharpening device comprising an elongated metal body having a ceramic surface on at least two contour portions selected from flat, rounded edge, and tapered.

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24. An edge sharpening device of claim 23 wherein said metal body is aluminum.

25. An edge sharpening device including at least one of a V groove and an abrasive strip.

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